

1 **DIVISION E—CLEAN COAL**

2 **SEC. 50001. AUTHORIZATION OF APPROPRIATIONS.**

3 (a) CLEAN COAL POWER INITIATIVE.—Except as
4 provided in subsection (b), there are authorized to be ap-
5 propriated to the Secretary to carry out the activities au-
6 thorized by this division \$200,000,000 for each of the fis-
7 cal years 2004 through 2012, to remain available until ex-
8 pended.

9 (b) LIMIT ON USE OF FUNDS.—The Secretary shall
10 transmit to the Committee on Energy and Commerce and
11 the Committee on Science of the House of Representa-
12 tives, and to the Senate, the report required by this sub-
13 section not later than March 31, 2005. Notwithstanding
14 subsection (a), no funds may be used to carry out the ac-
15 tivities authorized by this division after September 30,
16 2005, unless the report has been transmitted and one
17 month has elapsed since that transmission. The report
18 shall include, with respect to subsection (a), a 10-year
19 plan containing—

20 (1) a detailed assessment of whether the aggre-
21 gate funding levels provided under subsection (a) are
22 the appropriate funding levels for that program;

23 (2) a detailed description of how proposals will
24 be solicited and evaluated, including a list of all ac-
25 tivities expected to be undertaken;



1 (3) a detailed list of technical milestones for
2 each coal and related technology that will be pur-
3 sued; and

4 (4) a detailed description of how the program
5 will avoid problems enumerated in General Account-
6 ing Office reports on the Clean Coal Technology
7 Program, including problems that have resulted in
8 unspent funds and projects that failed either finan-
9 cially or scientifically.

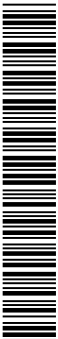
10 (c) APPLICABILITY.—Subsection (b) shall not apply
11 to any project begun before September 30, 2005.

12 **SEC. 50002. PROJECT CRITERIA.**

13 (a) IN GENERAL.—The Secretary shall not provide
14 funding under this division for any project that does not
15 advance efficiency, environmental performance, and cost
16 competitiveness well beyond the level of technologies that
17 are in commercial service or have been demonstrated on
18 a scale that the Secretary determines is sufficient to dem-
19 onstrate that commercial service is viable as of the date
20 of the enactment of this Act.

21 (b) TECHNICAL CRITERIA FOR CLEAN COAL POWER
22 INITIATIVE.—

23 (1) GASIFICATION.—(A) In allocating the funds
24 made available under section 50001(a), the Sec-
25 retary shall ensure that at least 60 percent of the



1 funds are used only for projects on coal-based gasifi-
2 cation technologies, including gasification combined
3 cycle, gasification fuel cells, gasification coproduc-
4 tion, and hybrid gasification/combustion.

5 (B) The Secretary shall periodically set tech-
6 nical milestones specifying the emission and thermal
7 efficiency levels that coal gasification projects must
8 be designed to and reasonably expected to achieve.
9 The technical milestones shall get more restrictive
10 during the life of the program. The Secretary shall
11 set the periodic milestones so as to achieve by 2020
12 coal gasification projects able—

13 (i) to remove 99 percent of sulfur dioxide;

14 (ii) to emit no more than .05 lbs of NOx
15 per million BTU;

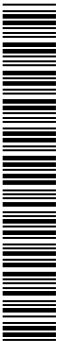
16 (iii) to achieve substantial reductions in
17 mercury emissions; and

18 (iv) to achieve a thermal efficiency of—

19 (I) 60 percent for coal of more than
20 9,000 Btu;

21 (II) 59 percent for coal of 7,000 to
22 9,000 Btu; and

23 (III) 50 percent for coal of less than
24 7,000 Btu.



1 (2) OTHER PROJECTS.—The Secretary shall pe-
2 riodically set technical milestones for projects not
3 described in paragraph (1). The milestones shall
4 specify the emission and thermal efficiency levels
5 that projects funded under this paragraph must be
6 designed to and reasonably expected to achieve. The
7 technical milestones shall get more restrictive during
8 the life of the program. The Secretary shall set the
9 periodic milestones so as to achieve by 2010 projects
10 able—

11 (A) to remove 97 percent of sulfur dioxide;

12 (B) to emit no more than .08 lbs of NO_x
13 per million BTU;

14 (C) to achieve substantial reductions in
15 mercury emissions; and

16 (D) to achieve a thermal efficiency of—

17 (i) 45 percent for coal of more than
18 9,000 Btu;

19 (ii) 44 percent for coal of 7,000 to
20 9,000 Btu; and

21 (iii) 40 percent for coal of less than
22 7,000 Btu.

23 (3) CONSULTATION.—Before setting the tech-
24 nical milestones under paragraphs (1)(B) and (2),
25 the Secretary shall consult with the Administrator of



1 the Environmental Protection Agency and interested
2 entities, including coal producers, industries using
3 coal, organizations to promote coal or advanced coal
4 technologies, environmental organizations, and orga-
5 nizations representing workers.

6 (4) EXISTING UNITS.—In the case of projects
7 at existing units, in lieu of the thermal efficiency re-
8 quirements set forth in paragraph (1)(B)(iv) and
9 (2)(D), the milestones shall be designed to achieve
10 an overall thermal design efficiency improvement
11 compared to the efficiency of the unit as operated,
12 of not less than—

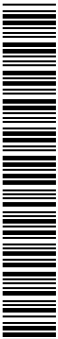
13 (A) 7 percent for coal of more than 9,000
14 Btu;

15 (B) 6 percent for coal of 7,000 to 9,000
16 Btu; or

17 (C) 4 percent for coal of less than 7,000
18 Btu.

19 (5) PERMITTED USES.—In allocating funds
20 made available under section 50001, the Secretary
21 may fund projects that include, as part of the
22 project, the separation and capture of carbon diox-
23 ide.

24 (c) FINANCIAL CRITERIA.—The Secretary shall not
25 provide a funding award under this division unless the re-



1 cipient has documented to the satisfaction of the Secretary
2 that—

3 (1) the award recipient is financially viable
4 without the receipt of additional Federal funding;

5 (2) the recipient will provide sufficient informa-
6 tion to the Secretary for the Secretary to ensure
7 that the award funds are spent efficiently and effec-
8 tively; and

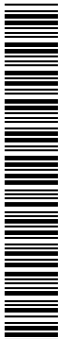
9 (3) a market exists for the technology being
10 demonstrated or applied, as evidenced by statements
11 of interest in writing from potential purchasers of
12 the technology.

13 (d) FINANCIAL ASSISTANCE.—The Secretary shall
14 provide financial assistance to projects that meet the re-
15 quirements of subsections (a), (b), and (c) and are likely
16 to—

17 (1) achieve overall cost reductions in the utiliza-
18 tion of coal to generate useful forms of energy;

19 (2) improve the competitiveness of coal among
20 various forms of energy in order to maintain a diver-
21 sity of fuel choices in the United States to meet elec-
22 tricity generation requirements; and

23 (3) demonstrate methods and equipment that
24 are applicable to 25 percent of the electricity gener-
25 ating facilities, using different types of coal, that use



1 coal as the primary feedstock as of the date of the
2 enactment of this Act.

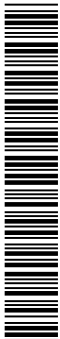
3 (e) FEDERAL SHARE.—The Federal share of the cost
4 of a coal or related technology project funded by the Sec-
5 retary under this division shall not exceed 50 percent.

6 (f) APPLICABILITY.—No technology, or level of emis-
7 sion reduction, shall be treated as adequately dem-
8 onstrated for purposes of section 111 of the Clean Air Act,
9 achievable for purposes of section 169 of that Act, or
10 achievable in practice for purposes of section 171 of that
11 Act solely by reason of the use of such technology, or the
12 achievement of such emission reduction, by one or more
13 facilities receiving assistance under this division.

14 **SEC. 50003. REPORT.**

15 Not later than 1 year after the date of the enactment
16 of this Act, and once every 2 years thereafter through
17 2011, the Secretary, in consultation with other appro-
18 priate Federal agencies, shall transmit to the Committee
19 on Energy and Commerce and the Committee on Science
20 of the House of Representatives, and to the Senate, a re-
21 port describing—

22 (1) the technical milestones set forth in section
23 50002 and how those milestones ensure progress to-
24 ward meeting the requirements of subsections
25 (b)(1)(B) and (b)(2) of section 50002; and



1 (2) the status of projects funded under this di-
2 vision.

3 **SEC. 50004. CLEAN COAL CENTERS OF EXCELLENCE.**

4 As part of the program authorized in section 50001,
5 the Secretary shall award competitive, merit-based grants
6 to universities for the establishment of Centers of Excel-
7 lence for Energy Systems of the Future. The Secretary
8 shall provide grants to universities that can show the
9 greatest potential for advancing new clean coal tech-
10 nologies.

11 **DIVISION F—HYDROGEN**

12 **SEC. 60001. DEFINITIONS.**

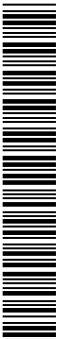
13 In this division:

14 (1) The term “Advisory Committee” means the
15 Hydrogen Technical and Fuel Cell Advisory Com-
16 mittee established under section 60005 of this Act.

17 (2) The term “Department” means the Depart-
18 ment of Energy.

19 (3) The term “fuel cell” means a device that di-
20 rectly converts the chemical energy of a fuel and an
21 oxidant into electricity by an electrochemical process
22 taking place at separate electrodes in the device.

23 (4) The term “infrastructure” means the equip-
24 ment, systems, or facilities used to produce, dis-



1 tribute, deliver, or store hydrogen and other ad-
2 vanced clean fuels.

3 (5) The term “light duty vehicle” means a car
4 or truck, classified by the Department of Transpor-
5 tation as a Class I or IIA vehicle.

6 (6) The term “Secretary” means the Secretary
7 of Energy.

8 **SEC. 60002. PLAN.**

9 Not later than six months after the date of enactment
10 of this Act, the Secretary shall transmit to the Congress
11 a coordinated plan for the programs described in this divi-
12 sion and any other programs of the Department that are
13 directly related to fuel cells or hydrogen. The plan shall
14 describe, at a minimum—

15 (1) the agenda for the next five years for the
16 programs authorized under this division, including
17 the agenda for each activity enumerated in section
18 60003(a);

19 (2) the types of entities that will carry out the
20 activities under this division and what role each enti-
21 ty is expected to play;

22 (3) the milestones that will be used to evaluate
23 the programs for the next five years;

24 (4) the most significant technical and nontech-
25 nical hurdles that stand in the way of achieving the



1 goals described in section 60003(b), and how the
2 programs will address those hurdles; and

3 (5) the policy assumptions that are implicit in
4 the plan, including any assumptions that would af-
5 fect the sources of hydrogen or the marketability of
6 hydrogen-related products.

7 **SEC. 60003. PROGRAM.**

8 (a) ACTIVITIES.—The Secretary, in partnership with
9 the private sector, shall conduct a program to address—

10 (1) production of hydrogen from diverse energy
11 sources, including—

12 (A) fossil fuels, which may include carbon
13 capture and sequestration;

14 (B) hydrogen-carrier fuels (including eth-
15 anol and methanol);

16 (C) renewable energy resources; and

17 (D) nuclear energy;

18 (2) the safe delivery of hydrogen or hydrogen-
19 carrier fuels, including—

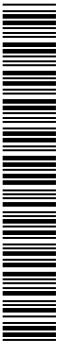
20 (A) transmission by pipeline and other dis-
21 tribution methods; and

22 (B) convenient and economic refueling of
23 vehicles either at central refueling stations or
24 through distributed on-site generation;

25 (3) advanced vehicle technologies, including—



- 1 (A) engine and emission control systems;
- 2 (B) energy storage, electric propulsion, and
- 3 hybrid systems;
- 4 (C) automotive materials;
- 5 (D) clean fuels in addition to hydrogen;
- 6 and
- 7 (E) other advanced vehicle technologies;
- 8 (4) storage of hydrogen or hydrogen-carrier
- 9 fuels, including development of materials for safe
- 10 and economic storage in gaseous, liquid, or solid
- 11 form at refueling facilities and onboard vehicles;
- 12 (5) development of safe, durable, affordable,
- 13 and efficient fuel cells, including research and devel-
- 14 opment on fuel-flexible fuel cell power systems, im-
- 15 proved manufacturing processes, high-temperature
- 16 membranes, cost-effective fuel processing for natural
- 17 gas, fuel cell stack and system reliability, low tem-
- 18 perature operation, and cold start capability; and
- 19 (6) development of necessary codes and stand-
- 20 ards (including international codes and standards)
- 21 and safety practices for the production, distribution,
- 22 storage, and use of hydrogen, hydrogen-carrier fuels
- 23 and related products.
- 24 (b) PROGRAM GOALS.—



1 (1) VEHICLES.—For vehicles, the goals of the
2 program are—

3 (A) to enable a commitment by auto-
4 makers no later than year 2015 to offer safe,
5 affordable, and technically viable hydrogen fuel
6 cell vehicles in the mass consumer market; and

7 (B) to enable production, delivery, and ac-
8 ceptance by consumers of model year 2020 hy-
9 drogen fuel cell and other vehicles that will
10 have—

11 (i) a range of at least three hundred
12 miles;

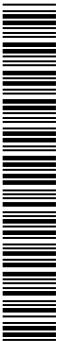
13 (ii) improved performance and ease of
14 driving;

15 (iii) safety and performance com-
16 parable to vehicle technologies in the mar-
17 ket;

18 (iv) when compared to light duty vehi-
19 cles in model year 2003—

20 (I) a fuel economy that is two
21 and one half times the equivalent fuel
22 economy of comparable light duty ve-
23 hicles in model year 2003; and

24 (II) near zero emissions of air
25 pollutants; and



1 (v) vehicle fuel system crash integrity
2 and occupant protection.

3 (2) HYDROGEN ENERGY AND ENERGY INFRA-
4 STRUCTURE.—For hydrogen energy and energy in-
5 frastructure, the goals of the program are to enable
6 a commitment not later than 2015 that will lead to
7 infrastructure by 2020 that will provide—

8 (A) safe and convenient refueling;

9 (B) improved overall efficiency;

10 (C) widespread availability of hydrogen
11 from domestic energy sources through—

12 (i) production, with consideration of
13 emissions levels;

14 (ii) delivery, including transmission by
15 pipeline and other distribution methods for
16 hydrogen; and

17 (iii) storage, including storage in sur-
18 face transportation vehicles;

19 (D) hydrogen for fuel cells, internal com-
20 bustion engines, and other energy conversion
21 devices for portable, stationary, and transpor-
22 tation applications; and

23 (E) other technologies consistent with the
24 Department's plan.



1 (3) FUEL CELLS.—The goals for fuel cells and
2 their portable, stationary, and transportation appli-
3 cations are to enable—

4 (A) safe, economical, and environmentally
5 sound hydrogen fuel cells;

6 (B) fuel cells for light duty and other vehi-
7 cles; and

8 (C) other technologies consistent with the
9 Department's plan.

10 (c) DEMONSTRATION.—In carrying out the program
11 under this section, the Secretary shall fund a limited num-
12 ber of demonstration projects. In selecting projects under
13 this subsection, the Secretary shall, to the extent prac-
14 ticable and in the public interest, select projects that—

15 (1) involve using hydrogen and related products
16 at facilities or installations that would exist without
17 the demonstration program, such as existing office
18 buildings, military bases, vehicle fleet centers, tran-
19 sit bus authorities, or parks;

20 (2) depend on reliable power from hydrogen to
21 carry out essential activities;

22 (3) lead to the replication of hydrogen tech-
23 nologies and draw such technologies into the market-
24 place;



1 (4) integrate in a single project both mobile and
2 stationary applications of hydrogen fuel cells;

3 (5) address the interdependency of demand for
4 hydrogen fuel cell applications and hydrogen fuel in-
5 frastructure; and

6 (6) raise awareness of hydrogen technology
7 among the public.

8 (d) DEPLOYMENT.—In carrying out the program
9 under this section, the Secretary shall, in partnership with
10 the private sector, conduct activities to facilitate the de-
11 ployment of—

12 (1) hydrogen energy and energy infrastructure;

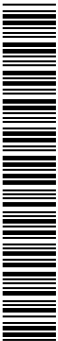
13 (2) fuel cells;

14 (3) advanced vehicle technologies; and

15 (4) clean fuels in addition to hydrogen.

16 (e) FUNDING.—(1) The Secretary shall carry out the
17 program under this section using a competitive, merit-re-
18 view process and consistent with the generally applicable
19 Federal laws and regulations governing awards of finan-
20 cial assistance, contracts, or other agreements.

21 (2) Activities under this section may be carried out
22 by funding nationally recognized university-based research
23 centers.



1 (3) The Secretary shall endeavor to avoid duplication
2 or displacement of other research and development pro-
3 grams and activities.

4 (f) COST SHARING.—

5 (1) REQUIREMENT.—For projects carried out
6 through grants, cooperative agreements, or contracts
7 under this section, the Secretary shall require a
8 commitment from non-Federal sources of at least—

9 (A) 20 percent of the cost of a project, ex-
10 cept projects carried out under subsections (c)
11 and (d); and

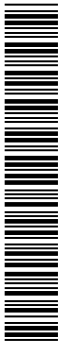
12 (B) 50 percent of the cost of a project car-
13 ried out under subsection (c) or (d).

14 (2) REDUCTION.—The Secretary may reduce
15 the non-Federal requirement under paragraph (1) if
16 the Secretary determines that—

17 (A) the reduction is appropriate consid-
18 ering the technological risks involved; or

19 (B) the project is for technical analyses or
20 other activities that the Secretary does not ex-
21 pect to result in a marketable product.

22 (3) SIZE OF NON-FEDERAL SHARE.—The Sec-
23 retary may consider the size of the non-Federal
24 share in selecting projects.



1 **SEC. 60004. INTERAGENCY TASK FORCE.**

2 (a) ESTABLISHMENT.—Not later than 120 days after
3 the date of enactment of this Act, the President shall es-
4 tablish an interagency task force chaired by the Secretary
5 or his designee with representatives from each of the fol-
6 lowing:

7 (1) The Office of Science and Technology Pol-
8 icy within the Executive Office of the President.

9 (2) The Department of Transportation.

10 (3) The Department of Defense.

11 (4) The Department of Commerce (including
12 the National Institute of Standards and Tech-
13 nology).

14 (5) The Environmental Protection Agency.

15 (6) The National Aeronautics and Space Ad-
16 ministration.

17 (7) Other Federal agencies as the Secretary de-
18 termines appropriate.

19 (b) DUTIES.—

20 (1) PLANNING.—The interagency task force
21 shall work toward—

22 (A) a safe, economical, and environ-
23 mentally sound fuel infrastructure for hydrogen
24 and hydrogen-carrier fuels, including an infra-
25 structure that supports buses and other fleet
26 transportation;



1 (B) fuel cells in government and other ap-
2 plications, including portable, stationary, and
3 transportation applications;

4 (C) distributed power generation, including
5 the generation of combined heat, power, and
6 clean fuels including hydrogen;

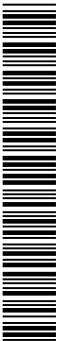
7 (D) uniform hydrogen codes, standards,
8 and safety protocols; and

9 (E) vehicle hydrogen fuel system integrity
10 safety performance.

11 (2) ACTIVITIES.—The interagency task force
12 may organize workshops and conferences, may issue
13 publications, and may create databases to carry out
14 its duties. The interagency task force shall—

15 (A) foster the exchange of generic, non-
16 proprietary information and technology among
17 industry, academia, and government;

18 (B) develop and maintain an inventory and
19 assessment of hydrogen, fuel cells, and other
20 advanced technologies, including the commercial
21 capability of each technology for the economic
22 and environmentally safe production, distribu-
23 tion, delivery, storage, and use of hydrogen;



1 (C) integrate technical and other informa-
2 tion made available as a result of the programs
3 and activities under this division;

4 (D) promote the marketplace introduction
5 of infrastructure for hydrogen and other clean
6 fuel vehicles; and

7 (E) conduct an education program to pro-
8 vide hydrogen and fuel cell information to po-
9 tential end-users.

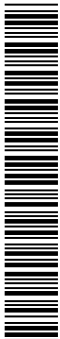
10 (c) AGENCY COOPERATION.—The heads of all agen-
11 cies, including those whose agencies are not represented
12 on the interagency task force, shall cooperate with and
13 furnish information to the interagency task force, the Ad-
14 visory Committee, and the Department.

15 **SEC. 60005. ADVISORY COMMITTEE.**

16 (a) ESTABLISHMENT.—The Hydrogen Technical and
17 Fuel Cell Advisory Committee is established to advise the
18 Secretary on the programs and activities under this divi-
19 sion.

20 (b) MEMBERSHIP.—

21 (1) MEMBERS.—The Advisory Committee is
22 comprised of not fewer than 12 nor more than 25
23 members. These members shall be appointed by the
24 Secretary to represent domestic industry, academia,
25 professional societies, government agencies, and fi-



1 nancial, environmental, and other appropriate orga-
2 nizations based on the Department's assessment of
3 the technical and other qualifications of committee
4 members and the needs of the Advisory Committee.

5 (2) TERMS.—The term of a member of the Ad-
6 visory Committee shall not be more than 3 years.
7 The Secretary may appoint members of the Advisory
8 Committee in a manner that allows the terms of the
9 members serving at any time to expire at spaced in-
10 tervals so as to ensure continuity in the functioning
11 of the Advisory Committee. A member of the Advi-
12 sory Committee whose term is expiring may be re-
13 appointed.

14 (3) CHAIRPERSON.—The Advisory Committee
15 shall have a chairperson, who is elected by the mem-
16 bers from among their number.

17 (c) REVIEW.—The Advisory Committee shall review
18 and make recommendations to the Secretary on—

19 (1) the implementation of programs and activi-
20 ties under this division;

21 (2) the safety, economical, and environmental
22 consequences of technologies for the production, dis-
23 tribution, delivery, storage, or use of hydrogen en-
24 ergy and fuel cells; and

25 (3) the plan under section 60002.



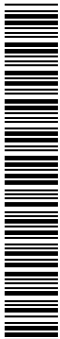
1 (d) RESPONSE.—(1) The Secretary shall consider,
2 but need not adopt, any recommendations of the Advisory
3 Committee under subsection (c).

4 (2) The Secretary shall transmit a biennial report to
5 the Congress describing any recommendations made by
6 the Advisory Committee since the previous report. The re-
7 port shall include a description of how the Secretary has
8 implemented or plans to implement the recommendations,
9 or an explanation of the reasons that a recommendation
10 will not be implemented. The report shall be transmitted
11 along with the President's budget proposal.

12 (e) SUPPORT.—The Secretary shall provide resources
13 necessary in the judgment of the Secretary for the Advi-
14 sory Committee to carry out its responsibilities under this
15 division.

16 **SEC. 60006. EXTERNAL REVIEW.**

17 (a) PLAN.—The Secretary shall enter into an ar-
18 rangement with a competitively selected nongovernmental
19 entity, such as the National Academy of Sciences, to re-
20 view the plan prepared under section 60002, which shall
21 be completed not later than six months after the entity
22 receives the plan. Not later than 45 days after receiving
23 the review, the Secretary shall transmit the review to the
24 Congress along with a plan to implement the review's rec-



1 ommendations or an explanation of the reasons that a rec-
2 ommendation will not be implemented.

3 (b) ADDITIONAL REVIEW.—The Secretary shall enter
4 into an arrangement with a competitively selected non-
5 governmental entity, such as the National Academy of
6 Sciences, under which the entity will review the program
7 under section 60003 during the fourth year following the
8 date of enactment of this Act. The entity's review shall
9 include the research priorities and technical milestones,
10 and evaluate the progress toward achieving them. The re-
11 view shall be completed no later than five years after the
12 date of enactment of this Act. Not later than 45 days after
13 receiving the review, the Secretary shall transmit the re-
14 view to the Congress along with a plan to implement the
15 review's recommendations or an explanation for the rea-
16 sons that a recommendation will not be implemented.

17 **SEC. 60007. MISCELLANEOUS PROVISIONS.**

18 (a) REPRESENTATION.—The Secretary may rep-
19 resent the United States interests with respect to activities
20 and programs under this division, in coordination with the
21 Department of Transportation, the National Institute of
22 Standards and Technology, and other relevant Federal
23 agencies, before governments and nongovernmental orga-
24 nizations including—



1 (1) other Federal, State, regional, and local
2 governments and their representatives;

3 (2) industry and its representatives, including
4 members of the energy and transportation indus-
5 tries; and

6 (3) in consultation with the Department of
7 State, foreign governments and their representatives
8 including international organizations.

9 (b) REGULATORY AUTHORITY.—Nothing in this divi-
10 sion shall be construed to alter the regulatory authority
11 of the Department.

12 **SEC. 60008. AUTHORIZATION OF APPROPRIATIONS.**

13 There are authorized to be appropriated to carry out
14 this division, in addition to any amounts made available
15 for these purposes under other Acts—

16 (1) \$273,500,000 for fiscal year 2004;

17 (2) \$325,000,000 for fiscal year 2005;

18 (3) \$375,000,000 for fiscal year 2006;

19 (4) \$400,000,000 for fiscal year 2007; and

20 (5) \$425,000,000 for fiscal year 2008.”.

21 **SEC. 60009. FUEL CELL PROGRAM AT NATIONAL PARKS.**

22 The Secretary of Energy, in cooperation with the Sec-
23 retary of Interior and the National Park Service, is au-
24 thorized to establish a program to provide matching funds
25 to assist in the deployment of fuel cells at one or more



1 prominent National Parks. The Secretary of Energy shall
2 transmit to Congress within 1 year, and annually there-
3 after, a report describing any activities taken pursuant to
4 such program. The report shall address whether activities
5 taken pursuant to such program reduce the environmental
6 impacts of energy use at National Parks. There are au-
7 thorized to be appropriated \$2,000,000 for each of fiscal
8 years 2004 through 2010 to carry out the purposes of this
9 section.

10 **SEC. 60010. ADVANCED POWER SYSTEM TECHNOLOGY IN-**
11 **CENTIVE PROGRAM.**

12 (a) PROGRAM.—The Secretary of Energy is author-
13 ized to establish an Advanced Power System Technology
14 Incentive Program to support the deployment of certain
15 advanced power system technologies and to improve and
16 protect certain critical governmental, industrial, and com-
17 mercial processes. Funds provided under this section shall
18 be used by the Secretary to make incentive payments to
19 eligible owners or operators of advanced power system
20 technologies to increase power generation through en-
21 hanced operational, economic, and environmental perform-
22 ance. Payments under this section may only be made upon
23 receipt by the Secretary of an incentive payment applica-
24 tion establishing an applicant as either—



1 (1) a qualifying advanced power system tech-
2 nology facility; or

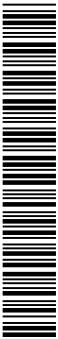
3 (2) a qualifying security and assured power fa-
4 cility.

5 (b) INCENTIVES.—Subject to availability of funds, a
6 payment of 1.8 cents per kilowatt-hour shall be paid to
7 the owner or operator of a qualifying advanced power sys-
8 tem technology facility under this section for electricity
9 generated at such facility. An additional 0.7 cents per kilo-
10 watt-hour shall be paid to the owner or operator of a quali-
11 fying security and assured power facility for electricity
12 generated at such facility. Any facility qualifying under
13 this section shall be eligible for an incentive payment for
14 up to, but not more than, the first 10,000,000 kilowatt-
15 hours produced in any fiscal year.

16 (c) ELIGIBILITY.—For purposes of this section—

17 (1) the term “qualifying advanced power system
18 technology facility” means a facility using an ad-
19 vanced fuel cell, turbine, or hybrid power system or
20 power storage system to generate or store electric
21 energy; and

22 (2) the term “qualifying security and assured
23 power facility” means a qualifying advanced power
24 system technology facility determined by the Sec-
25 retary of Energy, in consultation with the Secretary



1 of Homeland Security, to be in critical need of se-
2 cure, reliable, rapidly available, high-quality power
3 for critical governmental, industrial, or commercial
4 applications.

5 (d) AUTHORIZATION.—There are authorized to be ap-
6 propriated to the Secretary of Energy for the purposes
7 of this section, \$10,000,000 for each of the fiscal years
8 2004 through 2010.

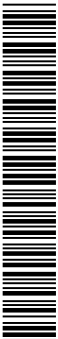
9 **DIVISION G—HOUSING**

10 **SEC. 70001. CAPACITY BUILDING FOR ENERGY-EFFICIENT,** 11 **AFFORDABLE HOUSING.**

12 Section 4(b) of the HUD Demonstration Act of 1993
13 (42 U.S.C. 9816 note) is amended—

14 (1) in paragraph (1), by inserting before the
15 semicolon at the end the following: “, including ca-
16 pabilities regarding the provision of energy efficient,
17 affordable housing and residential energy conserva-
18 tion measures”; and

19 (2) in paragraph (2), by inserting before the
20 semicolon the following: “, including such activities
21 relating to the provision of energy efficient, afford-
22 able housing and residential energy conservation
23 measures that benefit low-income families”.



1 **SEC. 70002. INCREASE OF CDBG PUBLIC SERVICES CAP FOR**
2 **ENERGY CONSERVATION AND EFFICIENCY**
3 **ACTIVITIES.**

4 Section 105(a)(8) of the Housing and Community
5 Development Act of 1974 (42 U.S.C. 5305(a)(8)) is
6 amended—

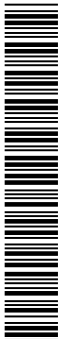
7 (1) by inserting “or efficiency” after “energy
8 conservation”;

9 (2) by striking “, and except that” and insert-
10 ing “; except that”; and

11 (3) by inserting before the period at the end the
12 following: “; and except that each percentage limita-
13 tion under this paragraph on the amount of assist-
14 ance provided under this title that may be used for
15 the provision of public services is hereby increased
16 by 10 percent, but such percentage increase may be
17 used only for the provision of public services con-
18 cerning energy conservation or efficiency”.

19 **SEC. 70003. FHA MORTGAGE INSURANCE INCENTIVES FOR**
20 **ENERGY EFFICIENT HOUSING.**

21 (a) SINGLE FAMILY HOUSING MORTGAGE INSUR-
22 ANCE.—Section 203(b)(2) of the National Housing Act
23 (12 U.S.C. 1709(b)(2)) is amended, in the first undesig-
24 nated paragraph beginning after subparagraph (B)(ii)(IV)
25 (relating to solar energy systems), by striking “20 per-
26 cent” and inserting “30 percent”.



1 (b) MULTIFAMILY HOUSING MORTGAGE INSUR-
2 ANCE.—Section 207(c) of the National Housing Act (12
3 U.S.C. 1713(c)) is amended, in the second undesignated
4 paragraph beginning after paragraph (3) (relating to solar
5 energy systems and residential energy conservation meas-
6 ures), by striking “20 percent” and inserting “30 per-
7 cent”.

8 (c) COOPERATIVE HOUSING MORTGAGE INSUR-
9 ANCE.—Section 213(p) of the National Housing Act (12
10 U.S.C. 1715e(p)) is amended by striking “20 per centum”
11 and inserting “30 percent”.

12 (d) REHABILITATION AND NEIGHBORHOOD CON-
13 SERVATION HOUSING MORTGAGE INSURANCE.—Section
14 220(d)(3)(B)(iii)(IV) of the National Housing Act (12
15 U.S.C. 1715k(d)(3)(B)(iii)(IV)) is amended by striking
16 “20 per centum” and inserting “30 percent”.

17 (e) LOW-INCOME MULTIFAMILY HOUSING MORT-
18 GAGE INSURANCE.—Section 221(k) of the National Hous-
19 ing Act (12 U.S.C. 1715l(k)) is amended by striking “20
20 per centum” and inserting “30 percent”.

21 (f) ELDERLY HOUSING MORTGAGE INSURANCE.—
22 Section 231(c)(2)(C) of the National Housing Act (12
23 U.S.C. 1715v(c)(2)(C)) is amended by striking “20 per
24 centum” and inserting “30 percent”.



1 (g) CONDOMINIUM HOUSING MORTGAGE INSUR-
2 ANCE.—Section 234(j) of the National Housing Act (12
3 U.S.C. 1715y(j)) is amended by striking “20 per centum”
4 and inserting “30 percent”.

5 **SEC. 70004. PUBLIC HOUSING CAPITAL FUND.**

6 Section 9 of the United States Housing Act of 1937
7 (42 U.S.C. 1437g) is amended—

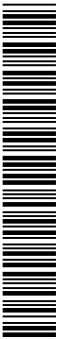
8 (1) in subsection (d)(1)—

9 (A) in subparagraph (I), by striking “and”
10 at the end;

11 (B) in subparagraph (J), by striking the
12 period at the end and inserting a semicolon;
13 and

14 (C) by adding at the end the following new
15 subparagraphs:

16 “(K) improvement of energy and water-use
17 efficiency by installing fixtures and fittings that
18 conform to the American Society of Mechanical
19 Engineers/American National Standards Insti-
20 tute standards A112.19.2-1998 and A112.18.1-
21 2000, or any revision thereto, applicable at the
22 time of installation, and by increasing energy
23 efficiency and water conservation by such other
24 means as the Secretary determines are appro-
25 priate; and



1 “(L) integrated utility management and
2 capital planning to maximize energy conserva-
3 tion and efficiency measures.”; and

4 (2) in subsection (e)(2)(C)—

5 (A) by striking “The” and inserting the
6 following:

7 “(i) IN GENERAL.—The”; and

8 (B) by adding at the end the following:

9 “(ii) THIRD PARTY CONTRACTS.—
10 Contracts described in clause (i) may in-
11 clude contracts for equipment conversions
12 to less costly utility sources, projects with
13 resident-paid utilities, and adjustments to
14 frozen base year consumption, including
15 systems repaired to meet applicable build-
16 ing and safety codes and adjustments for
17 occupancy rates increased by rehabilita-
18 tion.

19 “(iii) TERM OF CONTRACT.—The total
20 term of a contract described in clause (i)
21 shall not exceed 20 years to allow longer
22 payback periods for retrofits, including
23 windows, heating system replacements,
24 wall insulation, site-based generations, ad-
25 vanced energy savings technologies, includ-



1 ing renewable energy generation, and other
2 such retrofits.”.

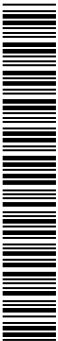
3 **SEC. 70005. GRANTS FOR ENERGY-CONSERVING IMPROVE-**
4 **MENTS FOR ASSISTED HOUSING.**

5 Section 251(b)(1) of the National Energy Conserva-
6 tion Policy Act (42 U.S.C. 8231(1)) is amended—

7 (1) by striking “financed with loans” and in-
8 serting “assisted”;

9 (2) by inserting after “1959,” the following:
10 “which are eligible multifamily housing projects (as
11 such term is defined in section 512 of the Multi-
12 family Assisted Housing Reform and Affordability
13 Act of 1997 (42 U.S.C. 1437f note)) and are subject
14 to mortgage restructuring and rental assistance suf-
15 ficiency plans under such Act,”; and

16 (3) by inserting after the period at the end of
17 the first sentence the following new sentence: “Such
18 improvements may also include the installation of
19 energy and water conserving fixtures and fittings
20 that conform to the American Society of Mechanical
21 Engineers/American National Standards Institute
22 standards A112.19.2-1998 and A112.18.1-2000, or
23 any revision thereto, applicable at the time of instal-
24 lation.”.



1 **SEC. 70006. NORTH AMERICAN DEVELOPMENT BANK.**

2 Part 2 of subtitle D of title V of the North American
3 Free Trade Agreement Implementation Act (22 U.S.C.
4 290m–290m-3) is amended by adding at the end the fol-
5 lowing:

6 **“SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.**

7 “Consistent with the focus of the Bank’s Charter on
8 environmental infrastructure projects, the Board members
9 representing the United States should use their voice and
10 vote to encourage the Bank to finance projects related to
11 clean and efficient energy, including energy conservation,
12 that prevent, control, or reduce environmental pollutants
13 or contaminants.”.

14 **SEC. 70007. ENERGY-EFFICIENT APPLIANCES.**

15 In purchasing appliances, a public housing agency
16 shall purchase energy-efficient appliances that are Energy
17 Star products or FEMP-designated products, as such
18 terms are defined in section 552 of the National Energy
19 Policy and Conservation Act (as amended by this Act),
20 unless the purchase of energy-efficient appliances is not
21 cost-effective to the agency.

22 **SEC. 70008. ENERGY EFFICIENCY STANDARDS.**

23 Section 109 of the Cranston-Gonzalez National Af-
24 fordable Housing Act (42 U.S.C. 12709) is amended—

25 (1) in subsection (a)—

26 (A) in paragraph (1)—



1 (i) by striking “1 year after the date
2 of the enactment of the Energy Policy Act
3 of 1992” and inserting “September 30,
4 2004”;

5 (ii) in subparagraph (A), by striking
6 “and” at the end;

7 (iii) in subparagraph (B), by striking
8 the period at the end and inserting “;
9 and”; and

10 (iv) by adding at the end the fol-
11 lowing:

12 “(C) rehabilitation and new construction of
13 public and assisted housing funded by HOPE
14 VI revitalization grants under section 24 of the
15 United States Housing Act of 1937 (42 U.S.C.
16 1437v), where such standards are determined
17 to be cost effective by the Secretary of Housing
18 and Urban Development.”; and

19 (B) in paragraph (2), by striking “Council
20 of American” and all that follows through
21 “90.1–1989’)” and inserting “2000 Inter-
22 national Energy Conservation Code”;

23 (2) in subsection (b)—

24 (A) by striking “1 year after the date of
25 the enactment of the Energy Policy Act of



1 1992” and inserting “September 30, 2004”;
2 and

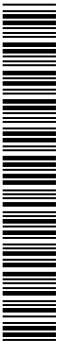
3 (B) by striking “CABO” and all that fol-
4 lows through “1989” and inserting “the 2000
5 International Energy Conservation Code”; and
6 (3) in subsection (c)—

7 (A) in the heading, by striking “MODEL
8 ENERGY CODE” and inserting “THE INTER-
9 NATIONAL ENERGY CONSERVATION CODE”;
10 and

11 (B) by striking “CABO” and all that fol-
12 lows through “1989” and inserting “the 2000
13 International Energy Conservation Code”.

14 **SEC. 70009. ENERGY STRATEGY FOR HUD.**

15 The Secretary of Housing and Urban Development
16 shall develop and implement an integrated strategy to re-
17 duce utility expenses through cost-effective energy con-
18 servation and efficiency measures and energy efficient de-
19 sign and construction of public and assisted housing. The
20 energy strategy shall include the development of energy
21 reduction goals and incentives for public housing agencies.
22 The Secretary shall submit a report to Congress, not later
23 than one year after the date of the enactment of this Act,
24 on the energy strategy and the actions taken by the De-
25 partment of Housing and Urban Development to monitor



- 1 the energy usage of public housing agencies and shall sub-
- 2 mit an update every two years thereafter on progress in
- 3 implementing the strategy.

